

**Session 15**  
**Substitution of hazardous chemicals**

Substitution of hazardous chemicals is a fundamental measure to reduce risks to environment, workers, consumers and public health. Finding safer alternatives of hazardous chemicals is a systematic approach and an integrated part of a chemical management system.

The implementation of this session will require about 45 -55 minutes.

**Learning outcomes**

At the end of this session, the participants will be able to

1. understand six steps to chemical substitution.
2. apply some substitution examples from the industry.

**Training materials required**

Presentations	Handouts/Worksheets	Reading
PPT 15_substitution of hazardous chemicals	Workbook session 15	REMC Company Handbook – sections 4.2

**Session plan**

Time in min	Content/Activity	Reference/Material
5	Introduction <ul style="list-style-type: none"> <li>• Present learning outcomes and overview of the session</li> </ul>	<i>PPT 15_substitution of hazardous chemicals slides 1 – 2</i>
10	Presentation - The Six steps to substitution <ul style="list-style-type: none"> <li>• Discuss 6 steps to chemical substitution</li> </ul>	<i>PPT 15_substitution of hazardous chemicals slides 4-11</i>
35	Presentation - Example of chemical substitution <ul style="list-style-type: none"> <li>• Explain sub sport, how it can support in substituting hazardous chemicals</li> <li>• How stakeholders, brands can support</li> <li>• Explain different priority chemicals with alternatives</li> </ul> Group exercise: Substitutions of hazardous chemicals <ul style="list-style-type: none"> <li>• Which chemicals from the 11 priority chemical groups have you substituted successfully?</li> <li>• Which chemicals from the 11 priority chemical groups are you working towards substituting?</li> </ul> Ask the participants present their findings to the peers and share the knowledge.	<i>PPT 15_substitution of hazardous chemicals slides 12-23</i>  <i>Work book session 15</i>
5	Closing <ul style="list-style-type: none"> <li>• Q&amp;A</li> <li>• Summaries key points of the session</li> </ul>	<i>PPT 15_substitution of hazardous chemicals slides 24-25</i>